IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims:

1. (Currently Amended) A system for making wireless communication processing between a wireless base station and an arbitrary wireless terminal apparatus, said system comprising:

a wireless communication apparatus for a base station, the apparatus including a plurality of antenna bodies each having a directional pattern in a predetermined direction; and

a wireless terminal apparatus, to become a communication target, that is operative to perform wireless communication with said wireless communication apparatus for the base station,

wherein said wireless communication apparatus for the base station is operative to perform:

prior to determination of whether video data is to be transmitted, transmission of a reference signal from a first antenna body to the wireless terminal apparatus,

subsequently and prior to determination of whether video data is to be transmitted, transmission of a reference signal from a second antenna body to the wireless terminal apparatus, wherein a range of detection of the reference signal by the wireless terminal apparatus is enlarged by the transmission of the reference signal alternately through each of the plurality of antenna bodies;

reception processing of at least a television signal;

transmission processing of an acknowledge signal to said wireless terminal apparatus within a communication area of each of the directional patterns of said antenna bodies regularly or irregularly;

identification processing of the communication-targeted wireless terminal apparatus located within a communication area by receiving a connection request signal sent from said wireless terminal apparatus based on said acknowledge signal;

storage processing of a correspondence relationship between said communication-targeted wireless terminal apparatus and each of said antenna bodies; and

at the time of making wireless communication, selection processing of the antenna body that corresponds to the pertinent wireless terminal apparatus based on the storage processing of the correspondence relationship stored beforehand,

wherein said wireless communication apparatus for the base station is adapted to perform scan processing of inputs of said antenna bodies and wait for receiving data, except for the time of making the wireless transmission,

wherein the wireless communication apparatus determines an optimal one of the antenna bodies for transmission based on signal strength of the connection request signal received by the antenna bodies prior to sending video data to the wireless terminal.

2. (Original) The wireless communication system according to claim 1,

wherein said wireless communication apparatus for the base station at least comprises:

a plurality of antenna bodies each having a directional pattern in a predetermined direction; and

a controller for allowing identifying the communication-targeted wireless terminal apparatus located within the communication area created by each of the directional patterns of said antenna bodies, and recognizing the correspondence relationship between the pertinent communication-targeted wireless terminal apparatus and each of said antenna bodies,

wherein said controller performs:

at the time of making wireless communication, selection processing of the antenna body which corresponds to the pertinent wireless terminal apparatus, and

communication processing with the wireless terminal apparatus located within the communication area created by the pertinent directional pattern, using said selected antenna body.

3. (Original) The wireless communication system according to claim 1, wherein said communication-targeted wireless terminal apparatus is located within the communication area created by the predetermined directional pattern of said wireless communication apparatus for the base station, or said communication-targeted wireless terminal apparatus moves between the communication areas of these pertinent directional patterns.

4. (Original) The wireless communication system according to claim 1, wherein said wireless communication apparatus for the base station comprises storing means for storing

antenna selection information indicative of the correspondence relationship between said communication-targeted wireless terminal apparatus and each of said antenna bodies.

5. (Previously Presented) The wireless communication system according to claim 4, wherein said wireless communication apparatus performs a memory control over said storing means to update said antenna selection information.

6. (Previously Presented) The wireless communication system according to claim 1, wherein said wireless communication apparatus regularly or irregularly transmits data for confirming that said communication-targeted wireless terminal apparatus is present in the communication area to the wireless terminal apparatus.

7. (Original) The wireless communication system according to claim 1,

wherein said wireless communication apparatus for the base station comprises at least two antenna bodies having different directional patterns from each other, and

wherein said wireless communication apparatus transmits a reference signal to the communication-targeted wireless terminal apparatus within the communication area created by the pertinent directional pattern from both of said antenna bodies alternately.

8. (Previously Presented) The wireless communication system according to claim 1,

wherein said wireless communication apparatus for the base station receives the data using the antenna body that receives the strongest radio wave from said communication-targeted wireless terminal apparatus.

9. (Currently Amended) A wireless communication apparatus for arbitrarily making wireless communication with a wireless terminal apparatus, to become a communication target, said apparatus comprising:

a plurality of antenna bodies each having a directional pattern in a predetermined direction; and

a controller for allowing identifying a communication-targeted wireless terminal apparatus located within a communication area created by each of the directional patterns of said antenna bodies, and recognizing a correspondence relationship between the pertinent communication-targeted wireless terminal apparatus and each of said antenna bodies,

wherein said controller is operative to perform:

prior to determination of whether video data is to be transmitted, transmission of a reference signal from a first antenna body to the wireless terminal apparatus,

subsequently and prior to determination of whether video data is to be transmitted, transmission of a reference signal from a second antenna body to the wireless terminal apparatus, wherein a range of detection of the reference signal by the wireless terminal apparatus is enlarged by the transmission of the reference signal alternately through each of the plurality of antenna bodies;

reception processing of at least a television signal;

transmission processing of an acknowledge signal to said wireless terminal apparatus within a communication area of each of the directional patterns of said antenna bodies regularly or irregularly;

identification processing of the communication-targeted wireless terminal apparatus located within a communication area by receiving a connection request signal sent from said wireless terminal apparatus based on said acknowledge signal;

at the time of making wireless communication, selection processing of the antenna body that corresponds to the pertinent wireless terminal apparatus based on the identification processing performed beforehand; and

communication processing with the wireless terminal apparatus located within the pertinent directivity using said selected antenna body,

wherein said controller is adapted to perform scan processing of inputs of said antenna bodies and wait for receiving data, except for the time of making the wireless transmission,

wherein the wireless communication apparatus determines an optimal one of the antenna bodies for transmission based on signal strength of the connection request signal received by the antenna bodies prior to sending video data to the wireless terminal.

10. (Original) The wireless communication apparatus according to claim 9, comprising storing means for storing antenna selection information indicative of the correspondence relationship between said communication-targeted wireless terminal apparatus and each of said antenna bodies.

11. (Previously Presented) The wireless communication apparatus according to claim 10, wherein said controller performs a memory control over said storing means to update said antenna selection information.

12. (Previously Presented) The wireless communication apparatus according to claim 9, wherein said controller regularly or irregularly transmits data for confirming that said communication targeted wireless terminal apparatus is present in the communication area to the wireless terminal apparatus.

13. (Original) The wireless communication apparatus according to claim 9, comprising said antenna bodies of at least two having different directional patterns from each other,

wherein the controller allows transmitting a reference signal to the communication-targeted wireless terminal apparatus within the pertinent directivity from both of said antenna bodies alternately.

14. (Previously Presented) The wireless communication apparatus according to claim 9, wherein the controller receives the data using the antenna body that receives the strongest radio wave from said communication-targeted wireless terminal apparatus.

15. (Currently Amended) A method for arbitrarily making wireless communication with a wireless terminal apparatus, to become a communication-target, said method comprising the steps of:

providing a plurality of antenna bodies each having a directional pattern in a predetermined direction to a wireless communication apparatus for a base station, and preparing the communication-targeted wireless terminal apparatus which is capable of wireless communication within a communication area created by the arbitrary directional pattern;

reception processing of at least a television signal;

in said wireless communication apparatus for the base station,

prior to determining of whether video data is to be transmitted, transmitting from a first antenna body a reference signal to the wireless terminal apparatus,

subsequently and prior to determining of whether video data is to be transmitted, transmission of a reference signal from a second antenna body to the wireless terminal apparatus, wherein a range of detection of the reference signal by the wireless terminal apparatus is enlarged by the transmission of the reference signal alternately through each of the plurality of antenna bodies;

regularly or irregularly identifying the communication-targeted wireless terminal apparatus located within a communication area created by each of the directional patterns of said antenna bodies;

storing a correspondence relationship between said identified communication-targeted wireless terminal apparatus and each of said antenna bodies;

at the time of making wireless communication,

selecting the antenna body which corresponds to the pertinent wireless terminal apparatus based on the correspondence relationship stored beforehand;

performing communication processing with the wireless terminal apparatus located within the pertinent directivity using said selected antenna body;

transmission processing of an acknowledge signal to said wireless terminal apparatus within the communication area of each of the directional patterns of said antenna bodies regularly or irregularly;

identification processing of the communication-targeted wireless terminal apparatus located within the communication area by receiving a connection request signal sent from said wireless terminal apparatus based on said acknowledge signal; and

performing scan processing of inputs of said antenna bodies and waiting for receiving data except for the time of making the wireless transmission,

wherein the wireless communication apparatus determines an optimal one of the antenna bodies for transmission based on signal strength of the connection request signal received by the antenna bodies prior to sending video data to the wireless terminal.

16. (Original) The wireless communication method according to claim 15, comprising the steps of locating said communication-targeted wireless terminal apparatus within the communication area created by the predetermined directional pattern of said wireless communication apparatus for a base station, or allowing said communication-targeted wireless terminal apparatus to move between the communication areas created by these directional patterns.

17. (Original) The wireless communication method according to claim 15, comprising the step of creating antenna selection information indicative of the correspondence relationship between said communication-targeted wireless terminal apparatus and each of said antenna bodies.

18. (Previously Presented) The wireless communication method according to claim 17, comprising the step of updating said antenna selection information.

19. (Previously Presented) The wireless communication method according to claim 15, comprising the step of regularly or irregularly transmitting data for confirming that said communication-targeted wireless terminal apparatus is present in the communication area to the wireless terminal apparatus.

20. (Original) The wireless communication method according to claim 15, further comprising the steps of:

providing said antenna bodies of at least two having different directivities from each other; and

transmitting a reference signal through both of said antenna bodies to the communication-targeted wireless terminal apparatus within the pertinent directivity alternately.

21. (Previously Presented) The wireless communication method according to claim 15, comprising the steps of:

receiving the data using the antenna body that receives the strongest radio wave from said communication-targeted wireless terminal apparatus.

THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK